# RFP Revision 12/20/2013 Section IV. N - Provide Post Implementation Support

## Request for Proposal Number 4544Z1

RFP Section IV.N Provide Post Implementation Support has been replaced and superseded in its entirety. RFP Sections IV.N.12 Warranty and RFP Section IV.N.13 Software Maintenance and Operations (M&O) have been revised.

### N. PROVIDE POST IMPLEMENTATION SUPPORT

The EES Contractor must provide EES hosting, Disaster Recovery services and a dedicated Service Desk and Application Support Help Desk. The Service Desk will provide the single point of contact for systems related issues. The Application Support Help Desk, to be staffed during business hours (to be determined by the State of Nebraska), will provide support for issues related to the systems business functionality which need to be escalated for investigation and resolution. Both the Service Desk and Application Support Help Desk must be integrated into the internal support structures within the State of Nebraska. The Service Desk, the Application Support Help Desk, and associated staff must be physically located in the continental United States.

#### 1. SYSTEM HOSTING

The EES Contractor will be responsible for hosting all systems during the DDI Period and must provide approach and costs for Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) for all environments. The EES must be hosted in a Tier IV data center with the provision of disaster recovery during the DDI Period. The Contractor shall provide, or utilize as applicable, the following hosted services by environment type. The Bidder is to propose, specify, implement and support as many environments or instances within each environment type as necessary to fully support the design, construction, delivery, operation and ongoing maintenance of the system as per this RFP. These environments are deliverables and are therefore required to be approved by the Department.

**Sandbox:** The sandbox environment is intended primarily for learning and experimentation of system features rather than for testing alterations to existing functionality. It isolates configuration changes and outright experimentation from the other environments within the systems landscape. Sandboxing protects "live" servers and their data, tested source code distributions, and other collections of code, data and/or content from changes that could be damaging. The Sandbox should replicate the minimal functionality needed to accurately test the functionality or configuration being exercised. This will be hosted by the Contractor in its facilities in the continental United States.

**Configuration/Development:** This environment will consist of the servers necessary to implement all the servers including Database, Application, Portal and other technical layers of the system stack. The environment will be used to support the daily software build cycle and to execute unit test to verify the continuous integration of the code base throughout the development cycle. This will be hosted by the Contractor in its facilities in the continental United States.

**Testing:** At scheduled intervals, specific builds of the code base will be placed into a "testing environment." This environment will be overseen by the testing team who will use it to verify functionality that has been implemented. This will be hosted by the Contractor in its facilities in the continental United States.

**Quality Assurance:** This environment will be used to assess compliance to requirements, risk of release, and performance capacity. This environment may be a scaled replication of the production environment to minimize errors caused by incompatibility. This will be hosted by the Contractor in its facilities in the continental United States.

**Production:** This environment should scale to accommodate the proposed and future capacity of the system and will be built for flexibility, scalability and redundancy. This will be hosted with the Contractor, or potentially collocated with other mission critical HHS applications with another provider. This will be hosted by the Contractor in its facilities in the continental United States.

**Training:** This separate and stable environment, must mirror production or as specified by the State of Nebraska, for use to train staff and other system users. The environment must have a minimum daily refresh capability to allow Trainers to delete practice and assessment data. This will be hosted by the Contractor in its facilities in the continental United States.
**Disaster Recovery:** All required environments to support the ongoing operation of the production system in the event of a disaster or outage condition at the selected computing center(s).

Each environment should be on a logically and/or physically separate sub-network to safeguard access to configuration, data, and code. The EES Contractor will maintain tight control over the configuration of all code through the use of a source control tool. This tool will provide the Development Team with the ability to check out code for editing in developer workstation sandboxes and to maintain a common code repository. At the end of the implementation of the EES, the State of Nebraska will have access to all environments.

The EES Contractor will provide a System Maintenance, Support and System Transition Plan for transitioning the production environment to the State of Nebraska's Data Center if desired by the State.

## 2. EQUIPMENT SUMMARY

The proposed infrastructure and systems will be housed in a purpose-built and dedicated physical environment. It is imperative that the proposed infrastructure and systems provide the highest level of control and responsiveness in meeting the State of Nebraska's business needs. The Primary Data Center (PDC) shall be configured at the Tier IV – Fault Tolerant Site Infrastructure Level (as defined by the Uptime Institute).

The PDC will provide processing power, control data traffic, and will house and manage all participant and program data. The PDC will at a minimum house:

**a.** Web Server(s);

**b.** Application Server(s);
**c.** Integration Server(s);
**d.** Portal Server(s);
**e.** Database Server(s);
**f.** Analytics Server(s);
**g.** Report Server(s); and
**h.** Storage Area Network (SAN).

The proposed infrastructure and solution set shall explore the use of server virtualization technologies in the data center in order to optimize the investments in server infrastructure and accelerate the ability to provision and deploy new servers and applications. Virtualization shall help reduce the TCO during the life of the EES.

In addition to these servers, managed enterprise class switches and routers shall help direct data traffic. Other hardware equipment at the PDC include generators, Uninterruptible Power Supplies (UPS) to provide continuous power in the event of a power failure, backup devices (Tape, RAID, SAN, etc.), Power Distribution Units (PDUs), fire suppression system, HVAC, telecommunications lines and equipment (DS3 lines) as well as an enterprise hardware firewall. Where applicable, the UPS should have the ability for unattended graceful shutdowns and restarts in the case of a total power failure.

A secondary data center will need to be established to handle failovers in case of problems with the PDC. This failover site equipment will mirror the PDC equipment configuration and data needed to restore full data center operations within the agreed to Recovery Time Objectives.

## 3. NETWORK

The Contractor is expected to provide highly redundant connectivity to the State of Nebraska Data Center facilities located in Lincoln, NE for all communications between the systems at Contractor's facility and those at the State of Nebraska. All users will be using the existing network infrastructure and functionality of the State of Nebraska's WAN. The Contractor is expected to leverage the State of Nebraska's WAN and the Internet to provide connectivity to all State of Nebraska workers.

## 4. IT SERVICE DESK

The EES Contractor will be responsible for providing a professional IT Service Desk to be physically located in the continental United States. The IT Service Desk will enable the central management of service delivery and provides the functions and oversight of Contractor's support services including:

**a.** Incident Management;
**b.** Problem Management;
**c.** Change Management; and
**d.** Service Requests.

Service support management represents a core support center that handles and manages the resolution of Incidents, Problems and Changes. This set of services manages events as they occur, and assures escalation, ownership and closure

of these events. The Service Desk should follow best practices based on ITIL v3 standards.

IT Service Desk approach should structure the engagement into four distinct stages:

**a.** **Stage 1:** Service Initiation - This stage covers all initiation activities.

**b.** **Stage 2:** Service Transition - This stage describes a process of transitioning the Service Desk into a full production environment.

**c.** **Stage 3:** Service Operations - This stage is the full systems support of the Maintenance & Operations Phase, where the Contractor has assumed full operational responsibilities.

**d.** **Stage 4:** Service Re-Transition - Upon written notification, if the State of Nebraska elects to assume operational responsibility for the Service Desk, this represents the stage where the Contractor will transfer knowledge and collateral to the State or a designated Service Provider.

During the above four staged approach, the following activities shall be addressed during Service Operations:

**a.** **PRODUCTION SUPPORT**
Supporting production, addressing system interruptions focusing on identifying and fixing system faults quickly or crafting workarounds enabling later root cause analysis and problem remediation.

**b.** **MAINTENANCE SUPPORT**
Making changes to existing functionality and features that are necessary to continue proper system operation. This includes routine maintenance, root cause analysis, applying change requirements, software upgrades, business need changes, rule changes, infrastructure policy impacts, and corrective, adaptive or perfective maintenance, as appropriate.

**c.** **ENHANCEMENT SUPPORT ANALYSIS**
Analyzing the functional and non-functional requirements for adding new functionality/features to the EES on prioritized requests from the user community. This includes interpreting any rules changes and other critical business needs from a technical and logistical standpoint.

**d.** **USER SUPPORT**
Providing application-specific support coordinated through the IT Service staff as well as conducting system research and inquiries.

**e.** **HELPDESK PLATFORM**
The IT Service Desk shall utilize a dedicated implementation of industry standard service desk software suite to be hosted and used by the State of Nebraska.

**f.** **DATABASE SUPPORT**

This includes both DB support as well as refactoring the EES to enhance database efficiency in storage and query response time and coordinating with system administrators to enable ideal hardware.

## 5. SOFTWARE CONFIGURATION MANAGEMENT

Software Configuration Management includes the identification and maintenance of System software components and the relationships and dependencies among them. These activities include:

**a.** Automatic capture and storage of IT Service to Application, Application-to-Component and Component-to-Component relationships; and

**b.** Maintenance of the history of those relationships and any transformation required to appropriately manage and document (e.g., source control, version control, profiles, security plans) configuration changes affecting the application and its processing environment.

Code Migration includes promoting new and modified code, configuration, and scripts, in support of new and existing applications through development, test, and production. These activities include:

**c.** Migrate code from development to test on an agreed upon basis;

**d.** Track migration status and notification;

**e.** Identify and resolve issues with the services delivery team and development teams;

**f.** Develop and document recommended operations and administration procedures related to code migration; and

**g.** Develop and document test-to-production turnover requirements and instructions for each project or release.

## 6. CHANGE AND RELEASE MANAGEMENT

Change and Release Management activities include services required to appropriately manage and document (e.g., impact analysis, version control, library management, turnover management, build management, parallel development) changes to the application and any of the constituent components being developed. Change and Release Management also includes services required to appropriately manage and document changes to the underlying application development environment components. These include the following:

**a.** Library Management the classification, control, and storage of the physical components of the application;

**b.** Version Control the maintenance, tracking, and auditing of modifications to an application's components over time, facilitating the restoration of an application to prior development stages; and

**c.** Turnover Management the automated promotion of software changes across different phases of the life cycle (e.g., development, unit test, systems test, and production), including management of the approval process, production turnover, and software migration control.

The EES shall utilize a centralized solution to automate and control the software change and release management process.

**a.** This software change and release management process will control migration patterns (i.e., how a given set of code moves from one environment to another); and

**b.** This software configuration management process will control versioning, access controls, data quality, etc., for each environment.

## 7. DATA RETENTION AND ARCHIVING

The EES should be designed to support multiple layers of data backup protection using a combination of both disk based and tape based technologies to meet the EES Backup and Recovery (BU/R) requirements.

The EES should leverage SAN replication and mirroring technologies to provide online, disk based system data protection. The EES should utilize SAN-based; block level data replication to protect both critical Database and Application components. Mission critical system components will also be mirrored synchronously to provide fast access to critical functions in the event of failure. In the event of catastrophic system failure at the primary site, clients can be redirected to the secondary site via DNS to utilize redundant systems present at the secondary site. Clients will then be able to retrieve application from replicated sources that will be up to date based on the last completed replication cycle.
Additionally, database replication should also be utilized to synchronize data between both primary and secondary databases. Finally, another layer of protection should be designed to provide traditional, versioned system data backup to tape storage. The implementation team shall create new backup job policies specific to the EES.

All EES database and application backup policies will utilize recommended schedules, and all policies will include at least one weekly full backup plus daily incremental backups to ensure data integrity and prevent data loss. Data on all tapes will also be encrypted to ensure security in the event tapes are taken to an offsite storage facility. The backup solution shall utilize on-line backup methodologies where possible that would enable quick backup and restore. Tape and off-site backups should be used to comply with long-term retention and meet the Nebraska Secretary of State Records Retention standards.

Documentation of all B/UR related processes and procedures will be generated during the course of the project, will be validated during system test, and will be presented t at project close. Additionally, processes and procedures that mandate routine testing and restoration of system backup data will also be developed. In this manner, the effectiveness and health of the proposed System B/UR solution will be continually validated.

## 8. SYSTEM PERFORMANCE MONITORING AND REPORTING

### a. PERFORMANCE MONITORING

Operational performance monitoring begins with the tracking of each and every service request via a ticket tracking tool capable of capturing and providing detailed information regarding the Contractor's efforts associated with resolving each specific request. The Contractor must ensure that all data collected is accessible by appropriate stakeholders to ensure an "open book" approach to problem management and performance monitoring.

### b. PERFORMANCE REPORTING

The Contractor's Service Delivery Manager is responsible for presenting the Monthly Performance Status deliverable against the SLR expectations. The monthly report will include monthly progress for each support area as well as a rolling trend chart. Any deviations from expected performance will be reviewed and discussed with agreements toward corrective action plans defined jointly with the appropriate State of Nebraska management. Continued failure to meet or exceed committed targets should result in escalation of issues.

**c. MONITORING TOOLS**

The Contractor should propose one or more monitoring tool(s) to proactively monitor the performance of key infrastructure components of the EES. These tools should provide a flexible, well-rounded solution for monitoring server and network health. These should also monitor basic services and database connectivity, and perform advanced monitoring of Web-based applications through customizable monitoring scripts. These tools should have extensively customizable dashboards to provide availability and response time on devices, URLs, WAN links and services; besides providing health and performance statics of the servers, network devices, services and applications. These tools should utilize a combination of ICMP, SNMP, and WMI protocols that enables them to monitor almost any networked device. Automatic alerting and reporting in multiple formats including email, SMS text messages, and application pop-up windows should also be available.

## 9. COMPLIANCE WITH FEDERAL HIPAA, HI-TECH AND STATE OF NEBRASKA CONFIDENTIALITY LAW

The EES Contractor acknowledges its duty to become familiar with and comply, to the extent applicable, with all requirements of the Federal Health Insurance Portability and Accountability Act (HIPAA), 42 U.S.C. § 1320d et seq. and implementing regulations including 45 CFR Parts 160 and 164. The Contractor also agrees to comply with all State of Nebraska Privacy Policies.

The Contractor shall maintain the privacy and security of all individually identifiable health information acquired by or provided to it as a part of the performance of this contract. The Contractor shall follow federal and State of Nebraska law relating to privacy and security of individually identifiable health information as applicable, including the Health Insurance Portability and Accountability Act (HIPAA) and its federal regulations.

Protected Health Information as defined in the HIPAA regulations at 45 CFR 160.103 and 164.501 means information transmitted that is individually identifiable; that is created or received by a healthcare provider, health plan, public health authority, employer, life insurer, school or university, or healthcare clearinghouse; and that is related to the past, present, or future physical or mental health or condition of an individual, to the provision of healthcare to an individual, or to the past, present, or future payment for the provision of healthcare to an individual. The definition excludes certain education records as well as employment records held by a covered entity in its role as employer.

Based on the determination that the functions to be performed in accordance with this RFP constitute Business Associate functions as defined in HIPAA, the EES Contractor shall execute a Business Associate Agreement as required by HIPAA regulations at 45 CFR §164.501.

## 10. DATA SYSTEMS ACCESS

The Contractor agrees that all information accessed in the State of Nebraska computer systems is the sole property of the State of Nebraska; Contractor employees are granted access to this under the terms and conditions of this Contract. All information collected and compiled by the Contractor under the terms and conditions defined in this Contract is the sole property of the State of Nebraska and subject to all privacy and security safeguards defined by the State of Nebraska.

The Contractor agrees that under the terms and conditions of the contract resulting from this RFP, that the State of Nebraska computer system access will only be granted to employees or subcontractors approved by the Department.

The Contractor agrees that under the terms of this contract they are responsible for ensuring all State of Nebraska approved subcontractors understand and agree to abide by the same terms and conditions defined in this contract.

The Contractor agrees that unique access logon accounts into the State of Nebraska's data systems will be assigned to an individual and that logon account may only be used by the individual to which it is originally assigned.

The Contractor agrees to access the State of Nebraska data systems only through State supplied CITRIX access and encryption technology.

The Contractor agrees to meet compliance requirements for all applicable State of Nebraska and federal physical, administrative, and electronic safeguard standards (as per safeguard publications listed below) and abide by State of Nebraska Information Technology Policies that govern the appropriate use of disclosure of privacy of and security of information provided by the State under the terms and conditions defined in this Contract.

## 11. SAFEGUARD PUBLICATIONS

**a.** Health Information Portability Accountability Act of 1996 (HIPPA—privacy rule 45 CFR Part 160 and subparts A and B of Part 164)
**b.** HIPPA – Security Rules 45 CFR Part 160 and subpart A and C Part 164
**c.** Internal Revenue Service (IRS) Publication 1075
**d.** Social Security Administration (SSA) – Computer Match Agreement
**e.** DHHS Information Technology Policies

The Contractor agrees that the State of Nebraska or federal agencies with jurisdiction (i.e., OCR, IRS, SSA, DHHS, or State of Nebraska Auditor's Office) may conduct unannounced compliance inspections related to the physical administrative and electronic safeguards defined in the publications listed above.

The Contractor understands that it will be held responsible for all criminal and civil penalties for actions of the subcontractor as defined in the publications listed above.

The Contractor agrees to immediately notify the State of Nebraska's HIPPA privacy/security office of any suspected loss of, threat of, inappropriate disclosure of, unauthorized access of, or destruction of and/or corruption of Departmental information obtained from Departmental computer systems and agree to comply with incident reporting criteria as defined in their BAA and the publication listed above.

The Contractor agrees to immediately notify the State of Nebraska of any lost or stolen computer hardware that may have been used to access, process, or store State of Nebraska information or State computer systems.

Contractor agrees to comply with State of Nebraska Breach Notification Law Revised Statute 87-802 any time there is a suspected loss of personal information as defined in the revised statute.

The Contractor agrees that no State of Nebraska information will be stored on a personal device and all State of Nebraska information stored, processed, or otherwise transmitted will be performed on State of Nebraska resources accessed through CITRIX or through the State of Nebraska secure e-mail system.

## 12. WARRANTY

The Contractor shall be responsible for fixing defects with the EES solution that occur during the DDI phase of the contract and for six (6) months into the operation of the entire solution at no additional cost. The six month Warranty period starts after the deployment of the full scope of the project into production.

The Contractor shall provide the equipment needed to support its staff for the duration of the warranty. The Contractor shall be responsible for the root cause analysis activities to demonstrate whether a defect is related to the scope of functionality delivered by the Contractor.

The six-month Warranty period includes maintenance, modifications and services needed to correct any faults, failures, errors or other defects in system functionality , and underlying systems, delivered as part of the EES DDI effort. The six-month Warranty period also includes any maintenance, modifications and support needed to stabilize the system so that system performance falls within agreed upon Service Level Requirements. All such fixes are required to occur in a reasonable timeframe (depending on severity as defined in the table below) and shall be produced at no additional cost to the State of Nebraska.

| Production Defect Severity | Response Time |
|---|---|
| Severity 1 - The EES no longer functions at all, or a System component is unavailable to more than 20% of active production users. | 4 Hours |
| Severity 2 - Any defect that affects less than 20% of the EES functionality or less than 20% of active | 8 Hours |

| | |
|---|---|
| production users. | |
| Severity 3 - The EES is able to function with a temporary workaround. | 72 Hours |

**a. PROPOSAL REQUIREMENTS**

The Bidder must provide a narrative overview of how the proposed solution will meet the EES requirements. The following response requirements pertaining to the Non-functional Requirements for the EES and must be responded by the Bidder.

Provide specific details of the proposed approach to meeting the State of Nebraska's requirements in each area. Also, include one or more diagrams where necessary that detail the proposed design and the relationships between key technical components.

Responses in this section must be highly-focused on the specific requirements and must not simply provide generic or marketing descriptions of technology or product capabilities.

**i.** Describe the proposed approach to system warranty, including the type of warranty being offered. In addition, provide a summary of the Bidder's proposed strategy for supporting that warranty. Please address the following areas (at a minimum):

**a)** Four-Year Software Warranty;
**b)** Staff Resources and Supporting Equipment; and
**c)** Meeting Service Level Requirements (SLRs)

**13. SOFTWARE MAINTENANCE AND OPERATIONS (M&O)**

A contract resulting from this Request for Proposal will be issued from the date of the award for six (6) years, with the option to renew for two (2) additional two-year renewal periods as mutually agreed upon by all parties. The initial period of the contract will be the Design, Development and Implementation (DDI) of the EES, with the expectation that it will be completed and approved by the State of Nebraska by December 31, 2015. The DDI period will be followed by a six-month Warranty period described in section XXXXX. The subsequent Base Maintenance and Operations Support (M&O) period shall be forty-two (42) months from the end of the Warranty period.

The Base M&O period, which begins at the end of the Warranty period, includes maintenance, modifications and services performed to correct faults, failures, errors or any other defects in system functionality, and underlying systems. In addition, Base M&O includes regular maintenance releases, systems modifications and/or services needed to keep the EES usable in a changed or changing environment.

Costs for this item must be clearly defined in the Cost Proposal. The Bidder shall communicate and document all software faults that are not a part of the scope of the original development effort during the M&S period.

At the expiration of the Base M&O period, the State of Nebraska may elect to enter optional renewal M&O Period(s). The scope of services covered under the optional renewal M&O Period(s) will be the same as the Base M&O period.

The Bidder agrees to propose two (2) two-year renewal M&O periods. The State of Nebraska shall be able to exercise its option to sign-up for the same services to those offered in the Base M&O period.

**a. PROPOSAL REQUIREMENTS**

This section defines Bidder requirements regarding the M&O Support approach (availability of staff, lead time for on-boarding of staff, staff due diligence process, knowledge transfer and documentation processes, etc.). The Bidder's proposal must provide information that can be used by the State of Nebraska to evaluate the Bidder's knowledge of, and intended approach to, the M&O Support requirements. This information must include at least the following:

**i.** Describe the approach for providing ongoing maintenance and support services, including a flexible and scalable approach to providing the various types of personnel, including:

**a)** Architect;
**b)** Business Analyst/Functional Lead;
**c)** Communication/Network Specialist;
**d)** Database Administrator;
**e)** Help Desk Specialist;
**f)** Hardware Specialist;
**g)** Operations Lead/Manager;
**h)** Project Manager;
**i)** Programmer;
**j)** Security Systems Engineer; and
**k)** Systems Administrator.

**ii.** Describe the approach to system operations support, including the levels of support offered and the process for requesting support. In addition, provide a summary of the strategy for maintaining and repairing the system. Please address the following areas (at a minimum):

**a)** Base Software Maintenance Period;
**b)** Incident and maintenance request reporting; and.
**c)** Optional Extension Software Maintenance Period.

**iii.** Describe the proposed approach to Defect Resolution and Solution Acceptance that shall incorporate methodologies and practices which will assist the State of Nebraska to successfully manage the enterprise's M&O lifecycle phase and shall address at least the following areas:

**a)** Support Model;
**b)** Triage Procedures;

**c)** Tools;
**d)** Roles and Responsibilities of support personnel;
**e)** Release Management;
**f)** Upgrades;
**g)** Maintenance;
**h)** On-going Operations;
**i)** Customer Support;
**j)** Specific support procedures for production;
**k)** Deliverables;
**l)** Capacity Management;
**m)**Technology Refresh;
**n)** Solution Security;
**o)** Backup and Recovery;
**p)** Disaster Recovery; and
**q)** Defect/Issue Management.

**iv.** Describe the approach to Solution Administration that shall incorporate methodologies and practices which will assist the State of Nebraska to successfully administrate the EES and shall address at least the following areas:

**a)** Archive/Purge of Log files;
**b)** Version control capabilities;
**c)** Logging and reporting for accessing errors and exceptions and unauthorized access;
**d)** Public key/private key encryption Secure Socket Layer (SSL) certificates;
**e)** Single sign-on capability and integration with Nebraska's Active Directory authentication and authorization;
**f)** Admin tools and maintenance routines;
**g)** Firewalls and DMZ for external access and remote access; and
**h)** Administration of User Accounts, User Roles, User Groups etc.

**v.** Describe the approach to Solution Management that shall incorporate methodologies and practices which will assist the State of Nebraska to successfully manage the EES and shall address at least the following areas:

**a)** Generate Administrative Alerts;
**b)** Updates to Distributed components;
**c)** SLR Monitoring;
**d)** Remote support;
**e)** Event Management and Monitoring using ITIL v3 or equivalent best practices; and
**f)** Application Performance Monitoring.

## 14. HOSTING AND DISASTER RECOVERY SERVICES

The State of Nebraska has requirements for the Contractor to host the environments associated with the development phases of the EES project (DDI period), provide support services to long term development environments,

provide application support services for production environment(s), as well as provide disaster recovery site and technical services.

**15. DEVELOPMENT ENVIRONMENTS**

The Bidder must propose, provide and operate all required environments to support its proposal for the specification, design, development and implementation of the system including, but not limited to the following environments:

**a.** Sandbox;
**b.** Configuration/Development;
**c.** Test;
**d.** Quality Assurance;
**e.** Production
**f.** Training; and
**g.** Disaster Recovery

These environments should be sized in accordance with planned use and be inclusive of all hardware, storage, networking, backup/restore, database, file system, monitors and other items as required to comprehensively support the development effort.

**16. PRODUCTION ENVIRONMENT**

The State of Nebraska may choose to use the services of the Contractor for the EES and EES Platform Production hosting. In advance of use, and in consideration of the State of Nebraska procurement, installation and commissioning cycles, the Bidder will specify all required environments to support their proposal for the ongoing specification, design, development of the project associated with subsequent cycles including, but not limited to the following environments:

**a.** Full Production Operation;
**b.** Production Replica for Fault Resiliency/Onsite Disaster Recovery Purposes and debugging/issue resolution purposes;
**c.** Offsite Disaster Recovery Replication; and
**d.** Other environments deemed necessary by the Contractor to support production operations.

These environments should be sized in accordance with planned use and be inclusive of all hardware, storage, networking, backup/restore, database, file system, monitors and other items as required to comprehensively support the ongoing development operation of the EES as well as to support the debugging or resolution of issues within the production environment.

**17. DISASTER RECOVERY ENVIRONMENTS**

The State of Nebraska may choose to use the services of the Contractor for the EES and the EES Platform Disaster Recovery site hosting. The Bidder must specify all required environments to support their proposal for the ongoing operation of the production system in the event of a disaster or outage condition at the selected computing center(s) associated with the following environments:

**a.** Full Production Operation;

**b.** Systems Development inclusive of then current code bases and associated data associated with the development effort; and

**c.** Other environments deemed necessary by the Bidder to support production operations in the event of an outage or disaster.

These environments should be sized in accordance with planned use and be inclusive of all hardware, storage, networking, backup/restore, database, file system, monitors and other items as required to support limited development effort during the disaster or outage condition as well as to not adversely impact or jeopardize phases that are being developed.

Bidders must detail the proposed approach to system hosting and disaster recovery support services, including the type and levels of services offered and the process for requesting changes to the services. In addition, provide a summary of the Bidder's strategy for ensuring stable and uninterrupted operations. Specifically, describe any industry best practices employed (e.g. ITIL) or certifications achieved (e.g. ISO 20000) that would provide assurances that the Bidder shall be able to provide a consistent and high quality level of services.

The term for providing these environments shall commence upon execution of an agreement between the State of Nebraska and Contractor, and shall conclude upon the end of the term for this contract or upon notification from the State of Nebraska of the desire to host the system(s) elsewhere. During the term of this contract the off-site hardware used by the Contractor to provide the hosting service is and will remain the property of the contractor. The State of Nebraska will pay the Contractor an agreed upon fee for the use of the hosted environments.

Upon notification by the State of Nebraska of the availability or receipt of the hardware to support these environments in the State of Nebraska data center or an alternate data center, the Contractor shall install, configure and commission for ongoing use these environments within the State of Nebraska data center or alternate data center, if required.

Upon completion of this migration and direction from the State of Nebraska, the old non-production environment should be decommissioned by the Contractor, any Contractor hardware usage charges arising from the use of this equipment shall no longer be the responsibility of, nor billed to the State of Nebraska, and all State data or other artifacts resident on this hardware shall be destroyed or otherwise deleted.